

Title (en)
Implantable blood pump.

Title (de)
Implantierbare Blutpumpe.

Title (fr)
Pompe sanguine implantable.

Publication
EP 0148661 A2 19850717 (FR)

Application
EP 84402406 A 19841126

Priority
FR 8320933 A 19831228

Abstract (en)
[origin: ES8604778A1] The blood circulating pump consists of an outer shell (10) and an elastically deformable pocket (20) which is filled with blood through an inlet valve (30) and which discharges the blood through an outlet valve (40). The pocket in its free state is flat but conforms to the shape of the shell when installed. - One end of the pocket is connected to the periphery of a drum (50) which is mounted in a U-shaped support. An electric motor inside the drum causes it to rotate backwards and forwards through a small angle applying intermittent tension to the pocket so that it draws in and discharges the blood.
[origin: ES8604778A1] The blood circulating pump consists of an outer shell (10) and an elastically deformable pocket (20) which is filled with blood through an inlet valve (30) and which discharges the blood through an outlet valve (40). The pocket in its free state is flat but conforms to the shape of the shell when installed. - One end of the pocket is connected to the periphery of a drum (50) which is mounted in a U-shaped support. An electric motor inside the drum causes it to rotate backwards and forwards through a small angle applying intermittent tension to the pocket so that it draws in and discharges the blood.

Abstract (fr)
A l'intérieur d'une coque souple (10), une poche (20) déformable dans son ensemble est reliée à la circulation sanguine par l'intermédiaire de valves d'entrée (30) et de sortie (40). Cette poche est comprimée par un ensemble monté flottant comprenant un tambour (50), autour de l'axe duquel est articulé un étrier (60). L'un des bords (21) de la poche (20) est fixé au tambour (50); l'autre bord (22) est relié à l'étrier (60) par une liaison de traction (70), par exemple un voile inextensible. La rotation relative du tambour par rapport à l'étrier sur une fraction de tour permet de réaliser un enroulement de la poche (20) à la périphérie du tambour (50), le retour à la position de départ étant assuré par la pression veineuse essentiellement. La disposition des différents éléments permet de réaliser un levier auto-adaptatif limitant les pertes mécaniques au frottement de roulement du tambour contre la poche.

IPC 1-7
A61F 2/22

IPC 8 full level
A61M 60/196 (2021.01); **A61M 60/279** (2021.01); **A61M 60/441** (2021.01); **A61M 60/508** (2021.01); **A61M 60/837** (2021.01); **A61M 60/894** (2021.01)

CPC (source: EP US)
A61M 60/196 (2021.01 - EP US); **A61M 60/279** (2021.01 - EP US); **A61M 60/441** (2021.01 - EP US); **A61M 60/508** (2021.01 - EP US); **A61M 60/837** (2021.01 - EP US); **A61M 60/894** (2021.01 - EP US); **A61M 60/148** (2021.01 - EP US)

Cited by
EP0521743A1; FR2677255A1; EP0505270A1; FR2674130A1; US5271746A

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0148661 A2 19850717; **EP 0148661 A3 19850814**; **EP 0148661 B1 19870715**; AT E28268 T1 19870815; AU 3696684 A 19850704; AU 570882 B2 19880324; CA 1224901 A 19870804; DE 3464695 D1 19870820; DK 164947 B 19920921; DK 164947 C 19930215; DK 625484 A 19850629; DK 625484 D0 19841221; ES 539019 A0 19860316; ES 8604778 A1 19860316; FR 2557462 A1 19850705; FR 2557462 B1 19860523; IL 73855 A0 19850331; IL 73855 A 19900429; JP H0380027 B2 19911220; JP S60158857 A 19850820; US 4576606 A 19860318; ZA 8410043 B 19850828

DOCDB simple family (application)
EP 84402406 A 19841126; AT 84402406 T 19841126; AU 3696684 A 19841220; CA 470409 A 19841218; DE 3464695 T 19841126; DK 625484 A 19841221; ES 539019 A 19841224; FR 8320933 A 19831228; IL 7385584 A 19841218; JP 28192284 A 19841228; US 68434884 A 19841219; ZA 8410043 A 19841221